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513	759	00 12/30/2004		EXAMINER	
WENDEROTH, LIND & PONACK, L.L.P.				PHASGE, ARUN S	
2033 K STREET N. W. SUITE 800 WASHINGTON, DC 20006-1021				ART UNIT	PAPER NUMBER
				1753	
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# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/030,420 Filing Date: January 10, 2002

Appellant(s): USUI, KEI

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GROUP 1700

Matthew M. Jacob For Appellant

EXAMINER'S ANSWER

Art Unit: 1753

This is in response to the appeal brief filed October 5, 2004.

# (1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

# (2) Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

#### (3) Status of Claims

The statement of the status of the claims contained in the brief is incorrect. A correct statement of the status of the claims is as follows:

The claims on appeal are 1 and 2.

Claims 1 and 2 have been rejected.

Claim 3 has been cancelled.

# (4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

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# (5) Summary of Invention

The summary of invention contained in the brief is correct.

#### (6) Issues

The appellant's statement of the issues in the brief is correct.

#### (7) Grouping of Claims

The rejection of claims 1-2 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See  $37 \, CFR \, 1.192(c)(7)$ .

#### (8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

#### (9) Prior Art of Record

5951839 Reznik 9-1999

JP 09-001153 Kawasaki 1/1997

# (10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reznik, U.S. Patent 5,951,839 in view of Japanese patent 09-001153 to Kawasaki.

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The Reznik patent by itself meets the method for improving the quality of a foodstuff, because the reference discloses the claimed method for improving the quality of a foodstuff comprising the steps of washing treatment with "activated" water (called reducing water by Reznik), wherein the water is formed by contacting water with a material having absorbed hydrogen which is produced by contacting said material with hydrogen gas, whereby said material bearing absorbed hydrogen releases hydrogen on contact with said water to activate said water (see figure 2 and col. 3, lines 33-37 and col. 6, lines 42-55). The material which absorbs the hydrogen is a ceramic material or a sintered material including a catalyst or graphite (see col. 4, lines 5-7).

The reference does not disclose the use of an alloy, such as a palladium-based alloy as the source of hydrogen. The Japanese patent is cited to show that palladium which when contacted with hydrogen gas absorbs the hydrogen to release said hydrogen into the aqueous food solution to preserve the solution (see abstract and page 1 section 0001 of the translation).

Consequently, the invention as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the disclosure of the Reznik patent, because the Japanese patent teaches that such

use of palladium containing material to provide hydrogen to water is routinely used .
in the art of activating water.

#### (11) Response to Argument

Applicant appears to argue that the Reznik reference does not disclose the claimed method because "other steps are also employed." The use of claim language "comprising" opens the claims to other steps or ingredients even in major amounts. Ex parte Davis 80 USPQ 448.

Applicant further states, "it is not apparent how the quality of the resultant produce is improved." The claims do not state how the quality of the resultant foodstuff is improved. In any event the produce is stored, which is the same result desired by the present disclosure, i.e., preservability (see page 3, lines 5-10).

Applicant further argues that "the reducing water is apparently produced by providing molecular hydrogen to the water from a suitable source such as a gas cylinder or an electrolysis device as disclosed in columns 6, lines 38-40. Applicants cannot do a piecemeal analysis of the reference, by failing to read the entire disclosure. The Reznik patent in the next lines discloses the hydrogen is absorbed

in the pores of the tube, which when contacted with water allows the release of the absorbed hydrogen to activate the water (see col. 6, lines 41-55).

Applicant appears to be raising the question that the activated water of Reznik would not be the same as the present activated water, since the reference does not disclose the use of the same type of alloy.

The activated water of Reznik would be the same as the present invention, because hydrogen does not change into another compound when it is absorbed onto an alloy (instant invention) or when it is absorbed onto a ceramic or sintered material (Reznik). The material when contacted with the water releases the absorbed hydrogen into water to form the activated water.

Thus, the Reznik patent by itself meets the method for improving the quality of a foodstuff by subjecting the foodstuff to a washing treatment with activated water.

As stated above, the fact that the present specification discloses that the present treatment actually provides a reduction in bacteria in various foodstuffs, without presenting any basis in the claims, does not impart patentability to the claims.

Appellant has pointed out the deficiencies in the secondary reference to Kawasaki. However, the rejection is based on the combination of references. The test of obviousness under 35 U.S.C. §103 is not the express suggestion of the claimed invention in any or all of the references, but what the references taken collectively would suggest to those of ordinary skill in the art presumed to be familiar with them. Ex parte Obiaya, 227 U.S.P.Q. 59 BDAPP (1985).

A mischaracterization of the Kawasaki reference should be pointed out; appellant states "Kawasaki is silent on impregnation of the electrode with hydrogen gas, although perhaps if the electroconductive material forming the electrode were a hydrogen-absorbing metal or alloy, the electrode may absorb a small volume of hydrogen gas." The Kawasaki reference discloses the blowing of hydrogen gas into the food solution, wherein the metal, metal oxide alloy, including palladium has hydrogen stuck to the surface from the hydrogen blown into the solution, which when released forms an activated water to react with the oxygen (see page 1, section 0001 and claim 1).

Therefore, the reference does disclose the use of a hydrogen absorbing metal or alloy which absorbs the hydrogen from the hydrogen gas to release the active hydrogen into the solution to remove the oxygen. Indeed the reference teaches that

without the placement of the metal alloy and the contact between said alloy and solution, little or no hydrogen appears in solution (see page 2, six lines from the bottom of the page).

Appellant appears to be making the argument that the combination of Kawasaki with the Reznik patent is untenable, since the references are non-analogous art.

The test for analogous art is two-step: 1) decide if art is in the field of the inventors endeavor. 2) if not, determine if reference is reasonably pertinent to the particular problem with which the inventor was involved. In re Deminski 230 USPQ 313, 315 (Fed. Cir. 1986).

The Kawasaki patent is in the field of the inventors endeavor, because the reference forms a reduced water (i.e., a hydrogen water), which is used to remove excess oxygen from the liquid foodstuff (see abstract and page 1, section 0001). And the reference is reasonably pertinent to the particular problem with which the inventor was involved, because the reference teaches that the liquid foodstuff can save a drink for a long period of time, i.e. preservability of foodstuff which is the particular problem with which the inventor was involved (see page 3, line 7).

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Consequently, the invention as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to use another conventional material to form the activated water to treat foodstuff as taught by Reznik, because the Kawasaki patent teaches a plurality of materials, including the claimed palladium to add hydrogen to an aqueous solution.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Primary Examiner

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asp

December 21, 2004

Conferees

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